REMARKS

In response to the Office Action mailed on April 20, 2007, Applicant(s) respectfully request(s) reconsideration.

Claims 1-39 are now pending in this Application.

Claims 1, 21, 24 and 37-39 are independent claims and the remaining claims are dependent claims.

In this Amendment, claims 1, 3, 10, 16-22, 24, 26, 31, 34-35 and 37-39 have been amended and claims 14, 15 and 32-33 have been canceled.

Applicant(s) believe that the claim(s) as presented are in condition for allowance. A notice to this affect is respectfully requested.

Objections:

Several claims have been objected for lack of proper antecedent basis. Applicant thanks the Examiner for these observations and has amended the claims accordingly. Claims 3, 10, 18, and 4 have been amended to depend from claim 2 rather than 1. Claim 16 has been amended to depend from claim 3. Claim 31 has been amended to depend from claim 25. Claim 34 has been amended to depend from claim 27. Claim 19 has been amended to depend from claim 12. Other claims have been amended accordingly to provide proper dependencies and antecedent basis.

Rejections under 35 U.S.C. §112:

Claim 20 has been amended to remove the trade specific references alluded to by the rejection.

Rejections under 35 U.S.C. §101:

Claims 24-36 and 38 have been rejected as non-statutory subject matter. These claims have been herein amended to clarify that they are directed to processor based instructions on a computer readable storage medium, and are therefore now believed within the statutory breadth of 35 U.S.C. §101. It is therefore respectfully requested that the rejection under 35 U.S.C. §101 be withdrawn. Claim 38, rejected on similar grounds, has been similarly amended.

Rejections under 35 U.S.C. §102(b) based on Silberschatz, et al:

The Office Action rejects claims 1-39 under 35 U.S.C. §102(b) based on Silberschatz, et al. Applicant(s) respectfully disagree(s) with these contentions and assert that the present claimed invention is not anticipated by any disclosure in the Silberschatz reference.

Specifically, the Office Action rejects Claim 1 based on the assertion that Silberschatz et al. teaches the claimed notification of a subscriber of expiration of a timer, referencing Silberschatz 12.3.3. For the reasons stated further below, it is respectfully submitted that the Silberschatz timer is an Operating System (OS), or kernel based timer, which differs from the claimed timer because the claimed timer is an application based timer responsive to an Application Programming Interface (API) and affects timers within the same program counter (PC) of the subscriber, while the OS kernel timer selects among the various PCs of all processes on the system/CPU. The claimed system therefore differs because the notified subscriber is invoked by user applications via an API, not kernel scheduling accessible only by the OS, as discussed at page 14, line 27-page 15, line 6.

In general, the claimed invention is directed to the problem of application process invocation of specific code at a particular time. This addresses the problem of inconsistent application developer practices by providing a common API for timer based invocations of components and modules. In contrast, the cited Silberschatz reference refers to general OS scheduling for all processes under a CPU. As is known in the art, each processing unit in a multiprogramming system maintains its own Program Counter (PC) indicative of the next instruction for execution, independent of other programming units. The OS allocates the CPU to each of the PCs of the programming units according to a scheduling mechanism, typically timer based. In this manner, the claimed timers are deferential to the native OS in that the claimed timers cannot supercede or overrule native OS scheduled allocations. Thus, while the OS scheduling is allocating a processor to a program counter (PC) of a particular

process or thread, the claimed timer operates within the PC of a thread (or other programming unit having its own PC). Therefore, it is only after the OS scheduler has dispatched execution to a particular process (under a particular PCB, or Process Control Block, as shown in Silberschatz Fig. 4.2), that the claimed activation and deactivation occurs within the program counter (PC) of the dispatched process.

Accordingly, claim 1 has been herein amended with the subject matter of claims 14 and 15, to further clarify that enabling modules correspond[s] to activation of a corresponding component by an activation mechanism, disabling corresponding to deactivation of the corresponding component by the activation mechanism, the activation and deactivation operations operable to reduce memory consumption by inactive components and provide selective invocation to maintain availability of the component, and that enabling and disabling [is] performed at a level of granularity of the modules, each of the modules corresponding to a component and operable be enabled and disabled by activation and deactivation of the corresponding component, as discussed in further detail at page 23, line 19-page 24, line 6 of the specification as filed.

Amended claim 1 is now distinguishable because the cited reference refers to operating system scheduling, and generally concerns process scheduling that is outside the control of user applications. In other words, a user application typically cannot modify its own scheduling in order to obtain a larger slice of CPU time. Only privileged and generally inaccessible processes are able to modify the scheduling parameters relevant to the process control block (PCB, 4.1.3) and the dispatch responsive execution (6.1.4) of main CPU time.

Independent claim 24, rejected on similar grounds, has been amended with the subject matter of claims 32 and 33, similar in scope to claims 14 and 15. Independent claims 21, 37, 38 and 29 have likewise been amended to further clarify and distinguish applicant's claimed invention, and further amended as below.

The timer handler activation operates on top of the native OS scheduling for invoking components and modules in further refinement to CPU scheduling. In other words, the claimed timer handlers and subscribers do not supercede the OS prescribed time slices, but rather provide API control of components and modules within the time slices ALREADY ALLOCATED by the native OS. This operation is further clarified at page 17, lines 16-25, clarifying that the claimed timer handlers are methods invoked by subscribers, not processes invoked by the OS. In this manner, the invoked timer handler is executing under the same PC of the subscriber which initiated it. In contrast, the OS invoked scheduling switches between the PCs of the various processes.

Accordingly, by way of further distinction, Claim 38 has been further amended to recite that the timer is "under the API control of application processes," as disclosed at page 14, lines 27-30.

Further, claim 39 has been herein amended to recite that the local timer table "corresponds to a particular program counter responsive to the scheduler of a native OS," as disclosed at page 21, line 19-page 22, line 17. Claims 21, 24 and 37-19 are therefore submitted as allowable.

As the remaining clams depend from, either directly or indirectly, from claims 1, 21 and 24, it is respectfully submitted that all claims are now in condition for allowance.

Applicant(s) hereby petition(s) for any extension of time which is required to maintain the pendency of this case. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50-3735.

If the enclosed papers or fees are considered incomplete, the Patent Office is respectfully requested to contact the undersigned collect at (508) 616-9660, in Westborough, Massachusetts.

Respectfully submitted,

/CJL/
Christopher J. Lutz, Esq.
Attorney for Applicant(s)
Registration No.: 44,883
Chapin Intellectual Property Law, LLC
Westborough Office Park
1700 West Park Drive
Westborough, Massachusetts 01581
Telephone: (508) 616-9660
Facsimile: (508) 616-9661

Attorney Docket No.: EMC03-25(03158)

Dated: July 20, 2007